REMARKS

Applicant respectfully requests re-consideration of the application in view of the arguments presented below.

Summary of Final Office Action

Claims 1-12 were pending.

Claims 1-2 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,619,567 of Apfel ("Apfel").

Claims 3-5 were rejected under 35 U.S.C. § 103 as being unpatentable over Apfel.

Claims 6-12 were rejected under 35 U.S.C. § 103 as being unpatentable over Apfel in view of U.S. Patent No. 5,878,133 of Zhou ("Zhou").

Summary of Amendments

Claims 1, 6, 9, and 10 were amended. Claims 13-16 were added. The amendments to claims 9-10 corrected grammar. Support for new claims 13-16 and the amendments to claims 1, 6 may be found at page 9, lines 16-24 and Figure 3 of the specification as originally filed. Applicant submits that the new claims and the claim amendments do not add new matter.

Response to 35 U.S.C. § 102 rejections

Claims 1-2 were rejected as being anticipated by Apfel. Applicant respectfully submits that Apfel does not teach or disclose a method of controlling a DC feed from a subscriber loop interface circuit (SLIC), including the steps of: switching between a normal mode and a modified mode *wherein the switching from the normal mode to the modified mode and the switching from the modified mode to the normal mode occur at distinct loop currents.*

The Examiner has stated:

> Apfel discloses a variable DC feed characteristic for a SLIC that switches from a normal mode 401 to a modified mode 402 DC feed (Fig. 4). The normal mode is switched to the modified mode when Vab is less than or

equal to threshold B. The mode is switched back to the normal mode at threshold E.

(08/15/2005 Final Office Action, p. 2)

Applicant submits that Apfel relies on a single loop current threshold to determine when to switch between modes. The Examiner is referred to Apfel's Figures 3 and 5. Note that switch 315 (531) is used to couple/decouple current source I3 from contributing to the I_{SUM} from which the loop current is derived. Switch 315 (531), however, is controlled by a hook switch detector (313/533) which indicates on hook/off-hook status by measuring the metallic loop current, I_L. Note that there is no distinction in the loop current between Apfel's points "B" and "E". (Apfel, col. 4, lines 7-39; col. 5, lines 35-50; col. 6, lines 38-49; Figs. 3, 4, 5).

Thus applicant respectfully submits Apfel does not teach or disclose a method of controlling a DC feed from a subscriber loop interface circuit (SLIC), including switching between a normal mode and a modified mode *wherein the switching from the normal mode to the modified mode and the switching from the modified mode to the normal mode occur at distinct loop currents.*

In contrast, claim 1 includes the language:

> 1. A method of controlling a DC feed from a subscriber loop interface circuit (SLIC), comprising the steps of:
>
> switching from a normal mode DC feed following a first characteristic curve to a modified mode DC feed following a second characteristic curve when $V_M \leq V_{THRESH1}$, wherein V_M is a subscriber loop voltage; and
>
> switching from the modified mode to the normal mode when $V_M \geq V_{THRESH2}$, wherein $V_{THRESH1} < V_{THRESH2}$, *wherein the switching from the normal mode to the modified mode and the switching from the modified mode to the normal mode occur at distinct loop currents.*

(Claim 1, as amended)(*emphasis added*)

Similar arguments can be presented with respect to claim 6 which includes the language:

> 6. A subscriber loop interface circuit apparatus comprising:
>
> control circuitry for controlling a subscriber loop DC feed; and
>
> a plurality of programmable registers storing values defining a first characteristic curve and a second characteristic curve, wherein the control

circuitry switches from a normal mode DC feed following a first characteristic curve to a modified mode DC feed following a second characteristic curve when $V_M \leq V_{THRESH1}$, wherein V_M is a subscriber loop voltage, wherein the control circuitry switches from the modified mode to the normal mode when $V_M \geq V_{THRESH2}$, wherein $V_{THRESH1} < V_{THRESH2}$, *wherein the switching from the normal mode to the modified mode and the switching from the modified mode to the normal mode occur at distinct loop currents.*

(Claim 6, as amended)(*emphasis added*)

Likewise, similar arguments may be made with respect to claim 13 which includes the language:

13. A method of controlling a DC feed from a subscriber loop interface circuit (SLIC), comprising the steps of:

switching from a normal mode DC feed following a first characteristic curve to a modified mode DC feed following a second characteristic curve when $I_L \geq I_{THL}$, wherein I_L is a subscriber loop current; and

switching from the modified mode to the normal mode when $I_L \leq I_{THH}$, *wherein* I_{THH} *and* I_{THL} *are distinct.*

(Claim 13)(*emphasis added*)

Applicant thus submits claims 1, 6, and 13 are not anticipated by Apfel. given that claims 2-5 depend from claim 1, claims 7-12 depend from claim 6, and claims 14-16 depend from claim 13, applicant submits claims 2-5, 7-12, and 14-16 are likewise not anticipated by Apfel.

Applicant submits that the 35 U.S.C. § 102 rejections have been overcome.

Response to 35 U.S.C. § 103 rejections

Claims 3-5 and 6-12 were rejected as being unpatentable in view of some combination of Apfel and Zhou. Applicant submits, however, that Zhou does not make up for the deficiencies of Apfel.

Thus applicant respectfully submits none of the references, alone or combined, teaches or suggests a method of controlling a DC feed from a subscriber loop interface circuit (SLIC), including switching between a normal mode and a modified mode *wherein the switching from the normal mode to the modified mode and the switching from the modified mode to the normal mode occur at distinct loop currents.*

Accordingly, claims 1-16 (including claims 3-5 and 6-12) are patentable in view of the cited references for the same reasons cited above with respect to the 35 U.S.C. § 102 arguments.

Applicant respectfully submits that the rejections under 35 U.S.C. § 103 have been overcome.

Conclusion

In view of the amendments and arguments presented above, applicant respectfully submits the applicable rejections and objections have been overcome. Accordingly, claims 1-16 should be found to be in condition for allowance.

If there are any issues that can be resolved by telephone conference, the Examiner is respectfully requested to contact the undersigned at **(512) 858-9910**.

Respectfully submitted,

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